# Commonwealth of Kentucky Energy and Environment Cabinet Department for Environmental Protection Division for Air Quality 200 Fair Oaks Lane, 1<sup>st</sup> Floor Frankfort, Kentucky 40601 (502) 564-3999

**Final** 

### AIR QUALITY PERMIT Issued under 401 KAR 52:030

Permittee Name: Hydro Aluminum North America, Inc.
Mailing Address: 5801 Riverport Road, Henderson KY 42420

Source Name: Hydro Aluminum North America, Inc.

Mailing Address: 5801 Riverport Road

Henderson, Kentucky

**Source Location:** Same as above

Permit ID: F-06-035 (Revision 2)

Agency Interest #: 1817

Activity ID: APE20080001
Review Type: Conditional Major
Source ID: 21-101-00130

**Regional Office:** Owensboro Regional Office

3032 Alvey Park Drive W., Suite 700 Owensboro, Kentucky 42303-2191

(270) 687-7304

**County:** Henderson County

Application

Complete Date: October 29, 2008
Issuance Date: February 20, 2007
Revision Date: August 18, 2007
Revision 2 Date: February 19, 2009
Expiration Date: February 20, 2012

John S. Lyons, Director Division for Air Quality

Revised 05/07/07

### TABLE OF CONTENTS

SECTION	ISSUANCE	PAGE
A. PERMIT AUTHORIZATION	Renewal	1
B. EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS	Revision 2	2
C. INSIGNIFICANT ACTIVITIES	Renewal	19
D. SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS	Revision 2	20
E. SOURCE CONTROL EQUIPMENT REQUIREMENTS	Revision 1	22
F. MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS	Revision 2	23
G. GENERAL PROVISIONS	Revision 2	26
H. ALTERNATE OPERATING SCENARIOS	Revision 2	33
I. COMPLIANCE SCHEDULE	Renewal	33

	Permit type	Log or Activity#	Complete Date	Issuance Date	Summary of Action
S-99-112	<b>Initial Issuance</b>	G206		October 27, 1999	Initial Construction Permit
F-06-035	Conditional Major	APE20050002	June 5, 2005	February 20, 2007	Permit Renewal
F-06-035	Revision 1	APE20070001	June 6, 2007	August 18, 2007	Minor revision. Addition of a Baghouse and increase of operation flexibility, while keeping same operation limitations. Correction to the Potential to emit.
F-06-035	Revision 2	APE20080001	October 29, 2008		Addition of an Alternative Operating Scenario

Permit Number: F-06-035 (Revision 2) Page 1 of 33

#### **SECTION A - PERMIT AUTHORIZATION**

Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the operation of the equipment described herein in accordance with the terms and conditions of this permit. This permit has been issued under the provisions of Kentucky Revised Statutes Chapter 224 and regulations promulgated pursuant thereto.

The permittee shall not construct, reconstruct, or modify any affected facilities without first submitting a complete application and receiving a permit for the planned activity from the permitting authority, except as provided in this permit or in 401 KAR 52:030, Federally-enforceable permits for non-major sources.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by this Cabinet or any other federal, state, or local agency.

Permit Number: F-06-035 (Revision 2) Page 2 of 33

# SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

### 01 (01) Aluminum Reverberatory Melting Furnace

**<u>Description:</u>** Batch Reverberatory Furnace – natural gas fired unit.

Maximum rated capacity: 50 mmBtu/hr and 50 ton/hr aluminum scrap.

Construction commenced: October 21, 1999

Control equipment: One baghouse with lime-injection, 2007.

Low NOx regenerative burners.

#### 01 (02) Aluminum Holding Furnace

**<u>Description:</u>** Aluminum Holding Furnace shares the baghouse with the Melting Furnace.

Batch holding furnace natural gas fired unit Maximum rated capacity: 25 mmBtu/hr Construction commenced: October 21, 1999

Control Equipment: One baghouse with lime-injection, 2007.

Low NOx cold air burners.

#### **APPLICABLE REGULATIONS:**

a. Regulation 401 KAR 59:010 apply to the particulate and visible emissions.

b. Regulation 401 KAR 63:002 Section 3 (1) (eee) (40 CFR 63 Subpart RRR) applies to the dioxins/furans (D/F) emissions only for EP 01(01) Aluminum Reverberatory Melting Furnace.

#### 1. **Operating Limitations:**

- a. The annual aluminum scrap charge shall not exceed 130,000 tons per 12-month rolling total, self-imposed to preclude major source classification pursuant to 401 KAR 52:020 and major source requirements in 40 CFR 63 Subpart RRR. The percentage of scrap that does not meet the definition of clean charge under 40 CFR 63.1503 shall not exceed 70%, unless a subsequent performance test demonstrates that a higher percentage of a non-clean charge meets the emission standard identified in 2. Emission Limitations, Section B for emission points 01(01) and 01(02), of this permit, and additionally the Division for Air Quality approves the higher percentage of non-clean charge based on the subsequent performance test..
- b. Except as outlined in Section H Alternative Operating Scenario(s), the associated control device(s) shall be operated all the time when the melting furnace is in operation and raw materials other than clean charge as defined by 40 CFR 63.1503, is charged to the melting furnace.

#### Compliance Demonstration:

Report any time when scrap, other than clean charge as defined by 40 CFR 63.1503, is charged to the furnace when the control device is not operating. The permittee shall scrape the furnace clean of any flux or contaminants when they are moving to charging only clean charge. Records shall be kept in a log of cleaning operations and dates of the switch to clean charge. See the **Specific Monitoring**,

Recordkeeping, and Reporting Requirements below and Section H – Alternative Operating Scenario(s). Hydro Aluminum must determine and calculate any

Permit Number: F-06-035 (Revision 2) Page 3 of 33

# SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

emissions in excess of Emission Limitations 2.a. and 2.b. resulting from operation without the control device, and report the deviation in accordance with 401 KAR 50:055. Records shall be kept of the maintenance activities.

- c. Pursuant to regulation 40 CFR 63.1506(m), Group 1 Furnace with add-on air pollution control devices, the owner or operator of a Group 1 furnace with emissions controlled by a lime-injected fabric filter must:
  - (1) If a bag leak detection system is used to meet the monitoring requirements in 40 CFR 63.1510, the owner or operator must:
    - (a) Initiate corrective action within 1 hour of a bag leak detection system alarm.
    - (b) Complete the corrective action procedures in accordance with the OM&M plan.
    - (c) Operate each fabric filter system such that the bag leak detection system alarm does not sound more than 5 percent of the operating time during a 6-month block reporting period. In calculating this operating time fraction, if inspection of the fabric filter demonstrates that no corrective action is required, no alarm time is counted. If corrective action is required, each alarm shall be counted as a minimum of 1 hour. If the owner or operator takes longer than 1 hour to initiate corrective action, the alarm time shall be counted as the actual amount of time taken by the owner or operator to
  - (2) Maintain the 3-hour block average inlet temperature for each fabric filter at or below the average temperature established during the performance test, plus 14 °C (plus 25 °F).
  - (3) For a continuous lime injection system, maintain free-flowing lime in the hopper to the feed device at all times and maintain the lime feeder setting at the same level established during the performance test.
- d. Pursuant to regulation 40 CFR 63.1506 (c) Capture/collection systems. For each affected source or emission unit equipped with an add-on air pollution control device, the owner or operator must:

initiate corrective action.

- (1) Design and install a system for the capture and collection of emissions to meet the engineering standards for minimum exhaust rates as published by the American Conference of Governmental Industrial Hygienists in chapters 3 and 5 of "Industrial Ventilation: A Manual of Recommended Practice" (incorporated by reference in 40 CFR63.1502 of this subpart);
- (2) Vent captured emissions through a closed system, except that dilution air may be added to emission streams for the purpose of controlling temperature at the inlet to a fabric filter; and
- (3) Operate each capture/collection system according to the procedures and requirements in the OM&M plan.
- e. On and after the compliance date established by 40 CFR 63.1501, the owner or operator must operate all new and existing affected sources and control equipment according to the requirements, 40 CFR 63.1506(a)(1)(4). External exhaust fans that vent to the atmosphere rather than the baghouse shall not operate in the building

# SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

containing the melting furnace. For negative pressure or induced air fabric filter, a Bag Leak Detection System must be installed downstream of the fabric filter. Operate each weight measurement system or other weight determination procedure in accordance with the OM&M plan. Measure the scrap aluminum production weight or estimate it from material balance and record the scrap aluminum production.

- f. Pursuant to 40 CFR 63.1506, the following additional operating requirements apply to D/F emissions from the Reverberatory Melting Furnace:
  - i. 40 CFR 63.1506 (b)(1) and (2) Labeling.
  - ii. 40 CFR 63.1506 (c) Capture/collection systems.
  - iii. 40 CFR 63.1506 (d) Feed/charge weight.
  - iv. 40 CFR 63.1506 (p) Corrective action.
- g. Record the weight of clean charge as defined in 40 CFR 63.1503 that is charged to the Reverberatory Melting Furnace without the associated control device (baghouse) in operation.

#### 2. <u>Emission Limitations</u>:

a. Particulate emissions shall not exceed the limit calculated by the following formula [401 KAR 59:010, Section 3(2)]:

$$E = 3.59 P^{0.62}$$

P = Process weight in tons per hour

E = Emission rate in pounds per hour

- b. Pursuant to 40 CFR 63.1505(i)(3): Dioxin/furan (D/F) emissions from the Reverberatory Melting Furnace shall not exceed 0.00021 grains of D/F TEQ/ton of charge or feed. The D/F emissions therefore shall not exceed 3.0 x 10<sup>-8</sup> lb/ton charge.
- c. Visible emissions shall not exceed 20% opacity [401 KAR 59:010, Section 3(2)].

#### Compliance Demonstration Method:

- a. Particulate emissions (lbs/hr) = [(Monthly raw material usage rate x Emission factor listed in Kentucky Emissions Inventory or derived from the most recent stack testing) / Hours of operation per month]
- b. (1) Pursuant to 40 CFR63.1513(b), compliance with the D/F emission limit from the Reverberatory Melting Furnace shall be calculated using Equation 7 as follows:

$$E = \frac{C \times Q \times K_1}{P}$$

E = Emission rate of D/F, lb/ton of feed;

C = Concentration of D/F, gr/dscf;

Q = Volumetric flow rate, dscf/hr;

K1 = Conversion factor 1 lb/7000 gr; and

P = Production rate, ton/hr.

# SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

(2) Pursuant to 40 CFR 63.1513(e)(3), the mass-weighted D/F emissions from the Melting Furnace shall be calculated using Equation 11 as follows:

$$E_{CD/F} = \frac{\sum_{i=1}^{n} (E_{tiD/F} \times T_{ti})}{\sum_{i=1}^{n} (T_{ti})}$$

 $Ec_{D/F}$  = Mass-weighted D/F emissions for the secondary aluminum processing unit;

 $Eti_{D/F}$  = Measured D/F emissions for individual emission unit i;  $T_{ti}$  = Average feed rate for individual emission unit i during the operating cycle or performance test period; and

n = Number of emission units in the secondary aluminum processing unit.

c. Opacity Limits: See the **Specific Monitoring**, **Recordkeeping**, and **Reporting Requirements**, below.

#### 3. <u>Testing Requirements</u>:

- a. The permittee shall perform stack testing in accordance with 401 KAR 59:005, Section 2(2), 401 KAR 50:045, Section 1 and for D/F emissions only, in accordance with 40 CFR
  - 63, Subpart RRR, utilizing the methods in Appendix A to 40 CFR 60, as described in 40 CFR 63.1511(c). Also see Section G(5), testing requirements.
- b. The testing required by **Testing Requirements**, **3.a**., shall be repeated upon the request of the Division. The performance test shall be performed to demonstrate compliance with the particulate and D/F emission standard identified in **Emission Limitations**, **2.a** and **2.b**.
- c. Dioxin/Furans emissions from the Reverberatory Melting Furnace shall be tested following procedures specified in:
  - i. 40 CFR 63.1511 Performance test/compliance demonstration general requirements:
    - A. 63.1511(a) Site-specific test plan;
    - B. 63.1511(b) Initial performance test;
    - C. 63.1511(c) Test methods;
    - D. 63.1511(d) Alternative methods;
    - E. 63.1511(g) Establishment of monitoring and operating parameters.
  - ii. 40 CFR 63.1512 Performance test/compliance demonstration requirements and procedures for D/F emissions from the Melting Furnace :
    - A. 63.1512(d)(1) Group 1 Furnace with add-on air pollution control devices;
    - B. 63.1512(j)(2) Secondary aluminum processing unit (D/F only);
    - C. 63.1512(p) Lime Injection;
    - D. 63.1512(q) Bag leak detection system;
    - E. 63.1512(k) Feed/charge weight measurement;
    - F. 63.1512(r) Labeling; and
    - G. 63.1512(s) Capture/collection system.

Permit Number: F-06-035 (Revision 2) Page 6 of 33

# SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- d The Company is authorized to process up to 100% painted scrap during the performance test required under **Testing**, **3.b.** above. Pursuant 40 CFR 63.1511 (b)(1), the owner or operator must conduct each test while the affected source or emission unit is operating at the highest production level with charge materials representative of the range of materials processed by the unit. The company should comply with all applicable emission limits included in Emission Limitation, 2(a), (b), and (c), and source wide limits listed in Section D (3) for PM/PM10, HCl and combined HAPS.
- e. In order to demonstrate compliance with PM limits, the permittee shall perform stack testing in accordance with 401 KAR 59:005, Section 2(2), 401 KAR 50:045, Section 1, for determination of PM emissions, once during the permit term. In case of a test failure, the facility should have to resubmit an application for a significant revision and continue with the 70% painted scrap operation limitation. Also, see Section G (5).
- f. Refer to Section D.

#### 4. Specific Monitoring Requirements:

- a. The permittee shall perform weekly qualitative visual observations of the opacity of emissions from the baghouse system.
- b. The permittee shall perform a Method 9 test for opacity on the applicable baghouse within 24 hours of observing visible emissions during any visual observations [401 KAR 59:010 (4)(5)].
- c. The permittee shall monitor the daily amounts and types of scrap charged to the melting furnace and daily hours of operation of melting furnace.
- d. In addition, monitoring procedures specified in 40 CFR 63.1510 apply to D/F emissions from the Reverberatory Melting Furnace:
  - i. 63.1510(b) Operation, maintenance, and monitoring (OM&M plan (except (4)(ii));
  - ii. 63.1510(c) Labeling;
  - iii. 63.1510(d) Capture/collection system;
  - iv. 63.1510(e) Feed/charge weight;
  - v. 63.1510(f) Fabric filters and lime-injected fabric filters;
  - vi. 63.1510(h) Fabric filters inlet temperature;
  - vii. 63.1510(i) Lime injection;
  - viii 63.1510(s) Site-specific requirements for secondary aluminum processing units;
  - ix. 63.1510(w) Alternative monitoring methods.
- e. The bag leak detection system must be equipped with an alarm system that will sound automatically when an increase in relative PM emissions over a preset level is detected. The alarm must be located where it is easily heard by plant operating personnel.
- f. Refer to Section F for specific and/or general monitoring requirements.

Permit Number: F-06-035 (Revision 2) Page 7 of 33

# SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

### 5. **Specific Recordkeeping Requirements:**

The permittee shall maintain a log of the dates and times of each qualitative visible emission observation and each Method 9 test and either the results of the test, or reasons for not performing a Method 9 test.

- a. In addition, recordkeeping requirements specified in 40 CFR 63.1517(a), 40 CFR 63.1517(b) (1)(i),(4),(7) and (13) through (17) apply to D/F emissions and air pollution control device, lime-injected fabric filter.
- b. If a bag leak detection system is used, the number of total operating hours for the affected source or emission unit during each 6-month reporting period, records of each alarm, the time of the alarm, the time corrective action was initiated and completed, and a brief description of the cause of the alarm and the corrective action(s) taken.
- c. See the Specific Monitoring Requirements above. Refer to Section F for specific and/or general recordkeeping requirements.

#### **Specific Reporting Requirements:**

- a. Any exceedance of the opacity, PM and D/F emission limitations as stated in this permit shall be reported to the Division as specified in Section F(6) of this permit.
- b. In addition, reporting requirements specified in 40 CFR 63 Subpart RRR apply to D/F emissions:
  - i. 40 CFR 63.1515 Notifications:
  - ii. 63.1515(a)(1) through (6) Initial notifications;
  - iii. 63.1515(b)(1), (3), (4), (5), (6), (9) and (10) Notification of compliance status report
  - iv. 40 CFR 63.1516(a) Reports Startup, shutdown, and malfunction plan;
  - (a) The owner or operator must develop a written plan as described in §63.6(e)(3) that contains specific procedures to be followed for operating and maintaining the source during periods of startup, shutdown, and malfunction, and a program of corrective action for malfunctioning process and air pollution control equipment used to comply with the standard. The owner or operator shall also keep records of each event as required by §63.10
  - (b) and record and report if an action taken during a startup, shutdown, or malfunction is not consistent with the procedures in the plan as described in §63.6(e)(3). In addition to the information required in 40 CFR 63.6(e)(3), the plan must include:
    - (1) Procedures to determine and record the cause of the malfunction and the time the malfunction began and ended; and
    - (2) Corrective actions to be taken in the event of a malfunction of a process or control device, including procedures for recording the actions taken to correct the malfunction or minimize emissions.
  - v. 63.1516(b)(1) and (3) Excess emissions/summary report;
  - vi. 63.1516(c) Annual compliance certifications.

# SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

### 7. <u>Specific Control Equipment Operating Conditions</u>:

The fabric filter unit shall be inspected and tested for proper operation annually. Preventative maintenance shall be performed in accordance with good engineering practices.

Permit Number: F-06-035 (Revision 2) Page 9 of 33

### SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

#### 04 (06) Melting and Holding Furnace Doors

**<u>Description:</u>** Fugitive emissions are released from the melting and holding furnace doors during

the charging, skimming, stirring, and cleaning. Construction commenced: October 21, 1999

Control Equipment: Particulate emissions are controlled by the existent baghouse

system installed on 11/01/1999.

#### **APPLICABLE REGULATIONS:**

Regulation 401 KAR 59:010 apply to the particulate and visible emissions.

#### 1. **Operating Limitations:**

None

#### 2. <u>Emission Limitations</u>:

a. Particulate emissions shall not exceed the limit calculated by the following formula [401 KAR 59:010, Section 3(2)]:

$$E = 3.59 P^{0.62}$$

P = Process weight in tons per hour

E = Emission rate in pounds per hour

b. Visible emissions shall not exceed 20% opacity [401 KAR 59:010, Section 3(2)].

#### **Compliance Demonstration Method:**

- a. Opacity Limits: See the **Specific Monitoring**, **Recordkeeping**, and **Reporting Requirements**, below.
- b. Particulate emissions (lbs/hr)
  - = [(Monthly raw material usage rate x Emission factor listed in Kentucky Emissions Inventory) / Hours of operation per month]

#### 3. <u>Testing Requirements</u>:

- a. In order to demonstrate compliance with PM limits, the permittee shall perform stack testing in accordance with 401 KAR 59:005, Section 2(2), 401 KAR 50:045, Section 1, for determination of PM emissions, once during the permit term.
- b. See Section D.

#### 4. Specific Monitoring Requirements:

a. The permittee shall perform weekly qualitative visible emission observation on the baghouse system.

Permit Number: F-06-035 (Revision 2) Page 10 of 33

# SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- b. The permittee shall perform a Method 9 test for opacity on the applicable baghouse within 24 hours of observing visible emissions during any Qualitative observation [401 KAR 59:010 (4)(5)].
- c. To provide reasonable assurance that the PM emission limitations are being met, the permittee shall monitor the weekly amount of process materials added and weekly hours of operation.
- d. The bag leak detection system must be equipped with an alarm system that will sound automatically when an increase in relative PM emissions over a preset level is detected. The alarm must be located where it is easily heard by plant operating personnel.
- e. Refer to Section F for specific and/or general monitoring requirements.

#### 5. **Specific Recordkeeping Requirements:**

- a. The permittee shall maintain a log of the dates and times of each qualitative visible emission observation and each Method 9 test and either the results of the test, or reasons for not performing a Method 9 test.
- b. If a bag leak detection system is used, the number of total operating hours for the affected source or emission unit during each 6-month reporting period, records of each alarm, the time of the alarm, the time corrective action was initiated and completed, and a brief description of the cause of the alarm and the corrective action(s) taken.
- c. Refer to Section F for specific and/or general recordkeeping requirements.
- d. See Specific Monitoring Requirements above.

#### **Specific Reporting Requirements:**

Any exceedance of the opacity, PM, or emission limitations as stated in this permit shall be reported to the Division as specified in Section F(6) of this permit.

#### 7. Specific Control Equipment Operating Conditions:

The fabric filter unit shall be inspected and tested for proper operation annually. Preventative maintenance shall be performed in accordance with good engineering practices.

Permit Number: F-06-035 (Revision 2) Page 11 of 33

# SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

#### 03 (03, 04, 05) Three Homogenizing Furnaces

**Description:** Three homogenizing furnace natural gas fired units

Maximum rated capacity: 15.5 mmBtu/hr each Construction commenced: October 21, 1999

Control Equipment: None

#### **APPLICABLE REGULATIONS:**

Regulation 401 KAR 59:010 applies to the particulate and visible emissions.

#### 1. **Operating Limitations:**

None

#### 2. Emission Limitations:

a. Particulate emissions shall not exceed the limit calculated by the following formula [401KAR 59:010, Section 3(2)]:

$$E = 3.59 P^{0.62}$$

P = Process weight in tons per hour

E = Emission rate in pounds per hour

b. Visible emissions shall not exceed 20% opacity [401 KAR 59:010, Section 3(2)].

#### Compliance Demonstration Method:

- a. Opacity Limits: See the **Specific Monitoring**, **Recordkeeping**, and **Reporting Requirements**, below.
- b. Particulate emissions (lbs/hr) =

[(Monthly raw material usage rate x Emission factor listed in Kentucky Emissions Inventory) / Hours of operation per month]

#### 3. Testing Requirements:

None.

### 4. **Specific Monitoring Requi**rements:

- a. Weekly observations of emissions from the exhaust stacks during the furnace operations. If visible emissions are observed, then an EPA Reference Method 9 shall be performed.
- b. To provide reasonable assurance that the PM emission limitations are being met, the permittee shall monitor the weekly amount of process materials added and weekly hours of operation.
- c. See Section 5 of this part, Specific Recordkeeping Requirements.

Permit Number: F-06-035 (Revision 2) Page 12 of 33

# SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

### 5. Specific Recordkeeping Requirements:

A log shall be kept on all visible emissions observations. Notification in the weekly log shall be made of the following:

- a. Whether any air emissions (except for water vapor) were visible from the plant.
- b. Weekly records of Method 9 visible observation if visible emissions are observed
- c. The permittee shall maintain a log of the dates and times of each qualitative visible emission observation and each Method 9 test and either the results of the test, or reasons for not performing a Method 9 test.
- d. See Specific Monitoring Requirements above.
- e. Refer to Section F for specific and/or general recordkeeping requirements.

### **Specific Reporting Requirements:**

Any exceedance of the opacity or PM emission limitations as stated in this permit shall be reported to the Division as specified in Section F(6) of this permit.

#### 7. Specific Control Equipment Operating Conditions:

Preventative maintenance shall be performed in accordance with good engineering practices.

Permit Number: F-06-035 (Revision 2) Page 13 of 33

# SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

#### 05 (06) Dross Handling

**Description:** Includes Roll off Box, Dross Pan, Dross Cooling Pad, Dross Press, and Waste

Storage Building.

Construction commenced: October 21, 1999

Control Equipment: Particulate emissions are controlled by a baghouse system.

#### **APPLICABLE REGULATIONS:**

Regulation 401 KAR 59:010 applies to the particulate and visible emissions.

#### 1. **Operating Limitations:**

The annual process rate of aluminum dross from each emissions point shall not exceed 15,000 tons/12-month rolling total.

#### 2. Emission Limitations:

a. Particulate emissions shall not exceed the limit calculated by the following formula [401 KAR 59:010, Section 3(2)]:

$$E = 3.59 P^{0.62}$$

P = Process weight in tons per hour

E = Emission rate in pounds per hour

b. Visible emissions shall not exceed 20% opacity [401 KAR 59:010, Section 3(2)].

#### **Compliance Demonstration Method:**

- a. Opacity Limits: See the **Specific Monitoring**, **Recordkeeping**, and **Reporting Requirements**, below.
- b. Particulate emissions (lbs/hr)

= [(Monthly raw material usage rate x Emission factor listed in Kentucky Emissions Inventory) / Hours of operation per month]

### 3. <u>Testing Requirements</u>:

None.

#### 4. Specific Monitoring Requirements:

- a. The permittee shall perform weekly qualitative visible emission observation from the furnace baghouse during furnace operations. If visible emissions are observed, then an EPA Reference Method 9 shall be performance.
- b. The permittee shall perform a Method 9 test for opacity on the applicable baghouse within 24 hours of observing visible emissions during any Qualitative observation[401 KAR 59:010 (4)(5)].

Permit Number: F-06-035 (Revision 2) Page 14 of 33

# SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

c. To provide reasonable assurance that the PM emission limitations are being met, the permittee shall monitor the weekly amount of process materials added and weekly hours of operation.

d. Refer to Section F for specific and/or general monitoring requirements.

#### 5. **Specific Recordkeeping Requirements:**

- a. The permittee shall maintain a log of the dates and times of each qualitative visible emission observation and each Method 9 test and either the results of the test, or reasons for not performing a Method 9 test.
- b. Refer to Section F for specific and/or general recordkeeping requirements.
- c. See Specific Monitoring Requirements above.
- d. If a bag leak detection system is used, the number of total operating hours for the affected source or emission unit during each 6-month reporting period, records of each alarm, the time of the alarm, the time corrective action was initiated and completed, and a brief description of the cause of the alarm and the corrective action(s) taken.

#### **Specific Reporting Requirements:**

Any exceedance of the opacity, PM emission limitations as stated in this permit shall be reported to the Division as specified in Section F(6) of this permit.

### 7. **Specific Control Equipment Operating Conditions:**

The fabric filter unit shall be inspected and tested for proper operation annually. Preventative maintenance shall be performed in accordance with good engineering practices.

Permit Number: F-06-035 (Revision 2) Page 15 of 33

# SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

#### 06 (-) Raw Material Handling and Charging.

**Description:** Includes aluminum handling equipment used to unload, move, and charge high-

density, high-quality aluminum scrap.

Construction commenced: October 21, 1999

Control Equipment: None.

#### **APPLICABLE REGULATIONS:**

Regulation 401 KAR 63:010 apply to fugitive emissions.

#### 1. **Operating Limitations:**

- a. The annual aluminum scrap handling and charging rate for emission point 06(-) shall not exceed 130,000 tons/12-month rolling total Self-imposed to preclude major source classification pursuant to 401 KAR 52:020 and major source requirements of 40 CFR 63 Subpart RRR.
- b. Pursuant to Regulation 401 KAR 63:010, Section 3, reasonable precautions shall be taken to prevent particulate matter from becoming airborne. Such reasonable precautions shall include, when applicable, but not be limited to the following:
  - i. Application and maintenance of asphalt, application of water, or suitable chemicals on roads, material stockpiles, and other surfaces which can create airborne dusts;
  - ii. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials, or the use of water sprays or other measures to suppress the dust emissions during handling.
- c. Pursuant to Regulation 401 KAR 63:010, Section 3, discharge of visible fugitive dust emissions beyond the property line is prohibited.

#### 2. Emission Limitations:

Refer to Section D.

#### 3. Testing Requirements:

None

#### 4. Specific Monitoring Requirements:

- a. To provide reasonable assurance that the PM emission limitations are being met, the permittee shall monitor the weekly amount of process materials added and weekly hours of operation.
- b. Refer to Section F for specific and/or general monitoring requirements.
- c. The permittee shall on a weekly basis inspect fugitive emission sources and take reasonable precautions as included under Operating Limitations above.
- d. The permittee shall monitor monthly scrap handling and charging rate and use it to calculate 12-month rolling total.

Permit Number: F-06-035 (Revision 2) Page 16 of 33

# SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

### 5. Specific Recordkeeping Requirements:

- a. Records of the weekly amount of all process materials added, and weekly hours of operation shall be maintained.
- b. Refer to Section F for specific and/or general recordkeeping requirements.
- c. The permittee shall maintain a log of weekly work practices, which are done to prevent fugitive emissions.

#### 6. **Specific Reporting Requirements:**

Any exceedance of the PM emission limitations as stated in this permit shall be reported to the Division as specified in Section F(6) of this permit.

Permit Number: F-06-035 (Revision 2) Page 17 of 33

# SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

#### 08 (-) Degassing Filter Station

**Description:** Hycast, I-60 SIR Degassing Filter Station performs non-reactive fluxing using argon.

Construction commenced: October 21, 1999

Control Equipment: None.

#### **APPLICABLE REGULATIONS:**

Regulation 401 KAR 63:010 applies to fugitive emissions.

Regulation 401 KAR 63:002 Section 3(eee) (40 CFR 63 Subpart RRR) applies to the type of flux.

#### 1. **Operating Limitations:**

- a. Pursuant to Regulation 401 KAR 63:010, Section 3, reasonable precautions shall be taken to prevent particulate matter from becoming airborne. Such reasonable precautions shall include, when applicable, but not be limited to the following:
  - i. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials, or the use of water sprays or other measures to suppress the dust emissions during handling.
- b. Pursuant to Regulation 401 KAR 63:010, Section 3, discharge of visible fugitive dust emissions beyond the property line is prohibited.
- c. The permittee shall perform non-reactive fluxing only Self-imposed to preclude the applicability of 40 CFR 63.1505(j).

#### 2. Emission Limitations:

Refer to Section D.

#### 3. <u>Testing Requirements</u>:

None.

### 4. **Specific Monitoring Requirements:**

- a. Pursuant to 40 CFR 63.1510(m), the owner or operator of an in-line fluxer that used no reactive flux materials must submit a certification of compliance with the operational standard for no reactive flux materials in 40 CFR63.1506(l) for each 6-month reporting period. Each certification must contain information in 40 CFR63.1516(b)(2)(vi).
- b. Refer to Section F for specific and/or general monitoring requirements.
- c. The permittee shall on a weekly basis inspect fugitive emission sources and take reasonable precautions as included under Operating Limitations above.
- d. The permittee shall monitor monthly scrap handling and charging rate and use it to calculate 12-month rolling total.

Permit Number: F-06-035 (Revision 2) Page 18 of 33

# SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

### 5. **Specific Recordkeeping Requirements:**

- a. Records of the weekly amount of all process materials added, and weekly hours of operation shall be maintained.
- b. Refer to Section F for specific and/or general recordkeeping requirements.
- c. The permittee shall maintain a log of weekly work practices, which are done to prevent fugitive emissions.

#### 6. **Specific Reporting Requirements:**

- a. Pursuant to 40 CFR 63.1516(b)(2)(vi) each report must include the certification for each in-line fluxer using no reactive flux: "Only nonreactive, non--containing, non-generating flux gases, agents, or materials were used at any time during this reporting period."
- b. Pursuant to 40 CFR 63.1517(b)(11), in addition to the general records required by 40 CFR63.10(b), the owner or operator must maintain records of operating logs for each inline fluxer using no reactive flux materials documenting each flux gas, agent or material used during each operating cycle.

### **SECTION C - INSIGNIFICANT ACTIVITIES**

The following listed activities have been determined to be insignificant activities for this source pursuant to 401 KAR 52:030, Section 6. Although these activities are designated as insignificant the permittee must comply with the applicable regulation. Process and emission control equipment at each insignificant activity subject to an opacity standard shall be inspected monthly and a qualitative visible emissions evaluation made. Results of the inspection, evaluation, and any corrective action shall be recorded in a log.

	<u>Description</u>	Generally Applicable Regulation
1.	Emission Point 07: Plant roadways and vehicular traffic	401 KAR 63:010
2.	Emission Point 09: Vertical direct chill caster	401 KAR 59:010
3.	Emission Point 10: 3 Billet coolers	401 KAR 59:010
4.	Emission Point 11: Billet saw (enclosed wet operation)	401 KAR 59:010
5.	Emission Point 13: 3 small space heaters < 1.0 mmBtu/hr each	NONE
6.	Emission Point 12: Briquette press.	401 KAR 59:010
7.	One 2000 gallon diesel storage tank	NONE
8.	One 300 gallon kerosene tank	NONE
9.	Cooling Tower	401 KAR 59:010
10.	05 (06) Dross Handling	401 KAR 59:010

Permit Number: F-06-035 (Revision 2) Page 20 of 33

# SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS

1. As required by Section 1b of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030, Section 26; compliance with annual emissions and processing limitations contained in this permit, shall be based on emissions and processing rates for any twelve (12) consecutive months.

- 2. *Particulate, dioxin/furan, and* HCl emissions, measured by applicable reference methods, or an equivalent or alternative method specified in 40 C.F.R. Chapter I, or by a test method specified in the state implementation plan shall not exceed the respective limitations specified herein.
- 3. Source-wide emission of particulate matter (PM), CO, and VOC shall not exceed 90 tons per year. Source wide individual HAP (HCl) emissions shall not exceed 9 tons per year and combined HAP emissions shall not exceed 22.5 tons per year.
- 4. To preclude major source classification per 401 KAR 52:020, and major source requirements of 40 CFR 63 Subpart RRR, the permittee shall provide reasonable assurance that the particulate emission limitation is met by monitoring the amount of process materials added. The hourly average process weight shall be equal to the weekly total process weight averaged over the hours of operation per day

Compliance with source-wide PM limitation will be determined by calculating the monthly emissions in tons per month (as follows) then adding that value to the previous 11 month emissions total to calculate the emissions in tons per year:

#### EP 01 Aluminum Reverberatory Melting Furnace

PM emissions (tons/month) = {[(Monthly total process weight (tons/month)) x (scrap PM emission factor (lb/ton) derived from most recent stack test)]} + [(Monthly total natural gas usage rate (mmcf/month)) x (AP-42 natural gas PM emission factor (lb/mmcf))] / 2000 lb/ton.

#### EP 02 Aluminum Holding Furnace

PM emissions (tons/month) =  $\{[(Monthly total process weight (tons/month)) \times (scrap PM emission factor (lb/ton)derived from most recent stack test)]\} + [(Monthly total natural gas usage rate (mmcf/month)) \times (AP-42 natural gas PM emission factor (lb/mmcf))] / 2000 lb/ton.$ 

#### EP 03 Three Homogenizing Furnaces

PM emissions (tons/month) =  $\{[(Monthly total natural gas usage rate (mmcf/month)) x (AP-42 natural gas PM emission factor)]\}$  2000 lb/ton.

#### EP 04 Melting and Holding Furnace Doors

PM emissions (tons/month) =  $\{[(Monthly total process weight (tons/month)) x (KYEIS scrap PM emission factor (0.05 lb /ton))]\} 2000 lb/ton.$ 

# SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS (Continued)

#### EP 05 Dross Handling

PM emissions (tons/month) =  $\{[(Monthly total process weight (tons/month)) x (KYEIS scrap PM emission factor (1.7 lb/ton))]\}$  2000 lb/ton.

#### EP 06 Raw Material Handling

PM emissions (tons/month) =  $\{[(Monthly total process weight (tons/month)) x (KYEIS scrap PM emission factor (0.105 lb/ton))] \} 2000 lb/ton.$ 

#### EP 08 Degassing Filter Station

PM emissions (tons/month) =  $\{[(Monthly total process weight (tons/month)) x (KYEIS scrap PM emission factor (0.06 lb /ton))]\} 2000 lb/ton.$ 

5. To preclude major source classification per 401 KAR 52:020 and major source requirements of 40 CFR 63 Subpart RRR, the permittee shall provide reasonable assurance that the HCl emission limitation is met by monitoring the amount of process materials added.

Compliance with source-wide limitation for HCl will be determined by adding the tons per month emission rate from each emission unit. The emissions shall be calculated on a monthly basis and shall be used to calculate the annual emission rate.

EP 01 and EP 02 Aluminum Reverberatory Melting Furnace and Aluminum Holding Furnace

HCL emissions (tons/month) = {[(Monthly total process weight (tons/month)) x ( HCl emission factor (lb /ton) derived from most recent stack test)]} / 2000 lb/ton

#### EP 04 Melting and Holding Furnace Doors

HCL emissions (tons/month) =  $\{[(Monthly total process weight (tons/month)) x (HCl emission factor (lb /ton) derived from most recent stack test)]\} 2000 lb/ton.$ 

Permit Number: F-06-035 (Revision 2) Page 22 of 33

### **SECTION E - SOURCE CONTROL EQUIPMENT REQUIREMENTS**

1. Pursuant to 401 KAR 50:055, Section 2(5), at all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Division which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

2. The fabric filter unit associated with EP 04(6) Melting and Holding Furnace doors and EP 05 (6) Dross Handling shall be inspected and tested for proper operation annually. Preventative maintenance shall be performed in accordance with good manufacturing practices.

Permit Number: F-06-035 (Revision 2) Page 23 of 33

# SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS

- 1. Pursuant to Section 1b-IV-1 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26, when continuing compliance is demonstrated by periodic testing or instrumental monitoring, the permittee shall compile records of required monitoring information that include:
  - a. Date, place (as defined in this permit), and time of sampling or measurements;
  - b. Analyses performance dates;
  - c. Company or entity that performed analyses;
  - d. Analytical techniques or methods used;
  - e. Analyses results; and
  - f. Operating conditions during time of sampling or measurement.
- 2. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of five years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality [401 KAR 52:030 Section 3(1)(f)1a and Section 1a-7 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26].
- 3. In accordance with the requirements of 401 KAR 52:030 Section 3(1)f the permittee shall allow authorized representatives of the Cabinet to perform the following during reasonable times:
  - a. Enter upon the premises to inspect any facility, equipment (including air pollution control equipment), practice, or operation;
  - b. To access and copy any records required by the permit:
  - c. Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements.

Reasonable times are defined as during all hours of operation, during normal office hours; or during an emergency.

- 4. No person shall obstruct, hamper, or interfere with any Cabinet employee or authorized representative while in the process of carrying out official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.
- 5. Summary reports of any monitoring required by this permit shall be submitted to the Regional Office listed on the front of this permit at least every six (6) months during the life of this permit, unless otherwise stated in this permit. For emission units that were still under construction or which had not commenced operation at the end of the 6-month period covered by the report and are subject to monitoring requirements in this permit, the report shall indicate that no monitoring was performed during the previous six months because the emission unit was not in operation [Sections 1b-V-1 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030, Section 26].

Permit Number: F-06-035 (Revision 2) Page 24 of 33

# SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

- 6. The semi-annual reports are due by January 30th and July 30th of each year. All reports shall be certified by a responsible official pursuant to 401 KAR 52:030 Section 22. If continuous emission and opacity monitors are required by regulation or this permit, data shall be reported in accordance with the requirements of 401 KAR 59:005, General Provisions, Section 3(3). All deviations from permit requirements shall be clearly identified in the reports.
- 7. In accordance with the provisions of 401 KAR 50:055, Section 1 the owner or operator shall notify the Regional Office listed on the front of this permit concerning startups, shutdowns, or malfunctions as follows:
  - a. When emissions during any planned shutdowns and ensuing startups will exceed the standards, notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.
  - b. When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards, notification shall be made as promptly as possible by telephone (or other electronic media) and shall be submitted in writing upon request.
- 8. The owner or operator shall report emission related exceedances from permit requirements including those attributed to upset conditions (other than emission exceedances covered by Section F.7 above) to the Regional Office listed on the front of this permit within 30 days. Deviations from permit requirements, including those previously reported under F.7 above, shall be included in the semiannual report required by F.6 [Sections 1b-V, 3 and 4 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26].
- 9. Pursuant to 401 KAR 52:030, Section 21, the permittee shall annually certify compliance with the terms and conditions contained in this permit by completing and returning a Compliance Certification Form (DEP 7007CC) (or an alternative approved by the regional office) to the Regional Office listed on the front of this permit in accordance with the following requirements:
  - a. Identification of each term or condition;
  - b. Compliance status of each term or condition of the permit;
  - c. Whether compliance was continuous or intermittent;
  - d. The method used for determining the compliance status for the source, currently and over the reporting period.
  - e. For an emissions unit that was still under construction or which has not commenced operation at the end of the 12-month period covered by the annual compliance certification, the permittee shall indicate that the unit is under construction and that compliance with any applicable requirements will be demonstrated within the timeframes specified in the permit.

Permit Number: F-06-035 (Revision 2) Page 25 of 33

# SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

f. The certification shall be postmarked by January 30th of each year. Annual compliance certifications shall be mailed to the following addresses:

Division for Air Quality Division for Air Quality

Owensboro Regional Office Central Files

3032 Alvey Park Drive W 200 Fair Oaks Lane, 1<sup>st</sup> Floor

Owensboro, KY 42303 Frankfort, KY 40601

- 10. In accordance with 401KAR 52:030, Section 3(1)(d), the permittee shall provide the Division with all information necessary to determine its subject emissions within thirty (30) days of the date the KYEIS emission survey is mailed to the permittee. If a KYEIS emission survey is not mailed to the permittee, then the permittee shall comply with all other emission reporting requirements in this permit.
- 11. The Cabinet may authorize the temporary use of an emission unit to replace a similar unit that is taken off-line for maintenance, if the following conditions are met:
  - a. The owner or operator shall submit to the Cabinet, at least ten (10) days in advance of replacing a unit, the appropriate Forms DEP7007AI to DD that show:
    - (1) The size and location of both the original and replacement units; and
    - (2) Any resulting change in emissions;
  - b. The potential to emit (PTE) of the replacement unit shall not exceed that of the original unit by more than twenty-five (25) percent of a major source threshold, and the emissions from the unit shall not cause the source to exceed the emissions allowable under the permit;
  - c. The PTE of the replacement unit or the resulting PTE of the source shall not subject the source to a new applicable requirement;
  - d. The replacement unit shall comply with all applicable requirements; and
  - e. The source shall notify Regional office of all shutdowns and start-ups.
  - f. Within six (6) months after installing the replacement unit, the owner or operator shall:
    - (1) Re-install the original unit and remove or dismantle the replacement unit; or
    - (2) Submit an application to permit the replacement unit as a permanent change.

Permit Number: F-06-035 (Revision 2) Page 26 of 33

#### **SECTION G - GENERAL PROVISIONS**

#### 1. General Compliance Requirements

- a. The permittee shall comply with all conditions of this permit. A noncompliance shall be a violation of 401 KAR 52:030 Section 3(1)(b) and a violation of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act). Noncompliance with this permit is grounds for enforcement action including but not limited to the termination, revocation and reissuance, revision, or denial of a permit [Section 1a-2 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26].
- b. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance, shall not stay any permit condition [Section 1a-5 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26].
- c. This permit may be revised, revoked, reopened and reissued, or terminated for cause in accordance with 401 KAR 52:030 Section 18. The permit will be reopened for cause and revised accordingly under the following circumstances:
  - (1) If additional applicable requirements become applicable to the source and the remaining permit term is three (3) years or longer. In this case, the reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. A reopening shall not be required if compliance with the applicable requirement is not required until after the date on which the permit is due to expire, unless this permit or any of its terms and conditions have been extended pursuant to 401 KAR 52:030 Section 12:
  - (2) The Cabinet or the U. S. EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements;
  - (3) The Cabinet or the U. S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.

Proceedings to reopen and reissue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Reopenings shall be made as expeditiously as practicable. Reopenings shall not be initiated before a notice of intent to reopen is provided to the source by the Division, at least thirty (30) days in advance of the date the permit is to be reopened, except that the Division may provide a shorter time period in the case of an emergency.

- d. The permittee shall furnish information upon request of the Cabinet to determine if cause exists for modifying, revoking and reissuing, or terminating the permit; or to determine compliance with the conditions of this permit [Sections 1a- 6 and 7 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26].
- e. Emission units described in this permit shall demonstrate compliance with applicable requirements if requested by the Division [401 KAR 52:030 Section 3(1)(c)].

Permit Number: F-06-035 (Revision 2) Page 27 of 33

### **SECTION G - GENERAL PROVISIONS (CONTINUED)**

f. The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to the permitting authority [401 KAR 52:030 Section 7(1)].

- g. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit [Section 1a-11 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26].
- h. The permittee shall not use as a defense in an enforcement action the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance [Section 1a-3 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26].
- i. Except for requirements identified in this permit as state-origin requirements, all terms and conditions shall be enforceable by the United States Environmental Protection Agency and citizens. [Section 1a-12-b of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26].
- j. This permit shall be subject to suspension if the permittee fails to pay all emissions fees within 90 days after the date of notice as specified in 401 KAR 50:038 Section 3(6) [Section 1a-9 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26].
- k. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance [401 KAR 52:030 Section 11(3)].
- 1. This permit does not convey property rights or exclusive privileges [Section 1a-8 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26].
- m. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Cabinet or any other federal, state, or local agency.
- n. Nothing in this permit shall alter or affect the authority of U.S. EPA to obtain information pursuant to Federal Statute 42 USC 7414, Inspections, monitoring, and entry.
- o. Nothing in this permit shall alter or affect the authority of U.S. EPA to impose emergency orders pursuant to Federal Statute 42 USC 7603, Emergency orders.

Permit Number: F-06-035 (Revision 2) Page 28 of 33

### **SECTION G - GENERAL PROVISIONS (CONTINUED)**

p. This permit consolidates the authority of any previously issued PSD, NSR, or Synthetic Minor source preconstruction permit terms and conditions for various emission units and incorporates all requirements of those existing permits into one single permit for this source.

- q. Pursuant to 401 KAR 52:030, Section 11, a permit shield shall not protect the owner or operator from enforcement actions for violating an applicable requirement prior to or at the time of permit issuance. Compliance with the conditions of this permit shall be considered compliance with:
  - (1) Applicable requirements that are included and specifically identified in this permit; and
  - (2) Non-applicable requirements expressly identified in this permit.

#### 2. Permit Expiration and Reapplication Requirements

- a. This permit shall remain in effect for a fixed term of five (5) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the Division at least six months prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the Division [401 KAR 52:030 Section 12].
- b. The authority to operate granted through this permit shall cease to apply if the source fails to submit additional information requested by the Division after the completeness determination has been made on any application, by whatever deadline the Division sets [401 KAR 52:030 Section 8(2)].

#### 3. Permit Revisions

- a. Minor permit revision procedures specified in 401 KAR 52:030 Section 14(3) may be used for permit revisions involving the use of economic incentive, marketable permit, emission trading, and other similar approaches, to the extent that these minor permit revision procedures are explicitly provided for in the SIP or in applicable requirements and meet the relevant requirements of 401 KAR 52:030 Section 14(2).
- b. This permit is not transferable by the permittee. Future owners and operators shall obtain a new permit from the Division for Air Quality. The new permit may be processed as an administrative amendment if no other change in this permit is necessary, and provided that a written agreement containing a specific date for transfer of permit responsibility coverage and liability between the current and new permittee has been submitted to the permitting authority within ten (10) days following the transfer.

#### 4. Construction, Start-Up, and Initial Compliance Demonstration Requirements

No construction authorized by this permit.

Permit Number: F-06-035 (Revision 2) Page 29 of 33

### **SECTION G - GENERAL PROVISIONS (CONTINUED)**

#### 5. <u>Testing Requirements</u>

a. Pursuant to 401 KAR 50:045 Section 2, a source required to conduct a performance test shall submit a completed Compliance Test Protocol form, DEP form 6028, or a test protocol a source has developed for submission to other regulatory agencies, in a format approved by the cabinet, to the Division's Frankfort Central Office a minimum of sixty (60) days prior to the scheduled test date. Pursuant to 401 KAR 50:045, Section 7, the Division shall be notified of the actual test date at least Thirty (30) days prior to the test.

- b. Pursuant to 401 KAR 50:045 Section 5, in order to demonstrate that a source is capable of complying with a standard at all times, any required performance test shall be conducted under normal conditions that are representative of the source's operations and create the highest rate of emissions. If [When] the maximum production rate represents a source's highest emissions rate and a performance test is conducted at less than the maximum production rate, a source shall be limited to a production rate of no greater than 110 percent of the average production rate during the performance tests. If and when the facility is capable of operation at the rate specified in the application, the source may retest to demonstrate compliance at the new production rate. The Division for Air Quality may waive these requirements on a case-by-case basis if the source demonstrates to the Division's satisfaction that the source is in compliance with all applicable requirements.
- c. Results of performance test(s) required by the permit shall be submitted to the Division by the source or its representative within forty-five days or sooner if required by an applicable standard, after the completion of the fieldwork.

### 6. Acid Rain Program Requirements

a. If an applicable requirement of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act) is more stringent than an applicable requirement promulgated pursuant to Federal Statute 42 USC 7651 through 7651o (Title IV of the Act), both provisions shall apply, and both shall be state and federally enforceable.

#### 7. Emergency Provisions

- a. Pursuant to 401 KAR 52:030 Section 23(1), an emergency shall constitute an affirmative defense to an action brought for noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or other relevant evidence that:
  - (1) An emergency occurred and the permittee can identify the cause of the emergency;

Permit Number: F-06-035 (Revision 2) Page 30 of 33

### **SECTION G - GENERAL PROVISIONS (CONTINUED)**

(2) The permitted facility was at the time being properly operated;

- (3) During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and,
- (4) The permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division within two (2) working days of the time when emission limitations were exceeded due to an emergency. The notice shall include a description of the emergency, steps taken to mitigate emissions, and the corrective actions taken.
- (5) Notification of the Division does not relieve the source of any other local, state or federal notification requirements.
- b. Emergency conditions listed in General Provision G.7.a above are in addition to any emergency or upset provision(s) contained in an applicable requirement [401 KAR 52:030 Section 23(3)].
- c. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof [401 KAR 52:030 Section 23(2)].

### 8. Ozone depleting substances

- a. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
  - (1) Persons opening appliances for maintenance, service, repair, or disposal shall comply with the required practices contained in 40 CFR 82.156.
  - (2) Equipment used during the maintenance, service, repair, or disposal of appliances shall comply with the standards for recycling and recovery equipment contained in 40 CFR 82.158.
  - (3) Persons performing maintenance, service, repair, or disposal of appliances shall be certified by an approved technician certification program pursuant to 40 CFR 82.161.
  - (4) Persons disposing of small appliances, MVACs, and MVAC-like appliances (as defined at 40 CFR 82.152) shall comply with the recordkeeping requirements pursuant to 40 CFR 82.166.
  - (5) Persons owning commercial or industrial process refrigeration equipment shall comply with the leak repair requirements pursuant to 40 CFR 82.156.
  - (6) Owners/operators of appliances normally containing 50 or more pounds of refrigerant shall keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.
- b. If the permittee performs service on motor (fleet) vehicle air conditioners containing ozone-depleting substances, the source shall comply with all applicable requirements as specified in 40 CFR 82, Subpart B, *Servicing of Motor Vehicle Air Conditioners*.

Permit Number: F-06-035 (Revision 2) Page 31 of 33

### **SECTION G - GENERAL PROVISIONS (CONTINUED)**

### 9. Risk Management Provisions

a. The permittee shall comply with all applicable requirements of 401 KAR Chapter 68, Chemical Accident Prevention, which incorporates by reference 40 CFR Part 68, Risk Management Plan provisions. If required, the permittee shall comply with the Risk Management Program and submit a Risk Management Plan to:

RMP Reporting Center P.O. Box 1515 Lanham-Seabrook, MD 20703-1515.

b. If requested, submit additional relevant information to the Division or the U.S. EPA.

Permit Number: F-06-035 (Revision 2) Page 32 of 33

#### SECTION H - ALTERNATE OPERATING SCENARIOS

The alternate operating scenarios set forth below have been approved by the Division based on information supplied with the application and during the application review process. The terms and conditions of each alternate operating scenario have been developed to ensure compliance with the applicable regulations. The permittee, when making a change from one operating scenario to another, shall record contemporaneously in a log at the permitted facility a record of the scenario under which the facility is operating. The permit shield, as provided in Section G, shall extend to each alternate operating scenario set forth in this Section. All conditions not specified under an alternate operating scenario shall remain unchanged from their permit values or requirements.

### **Alternate OPERATING SCENARIO**

#### **Processing of Clean Charge Without Control Device**

- a. Clean charge, as defined in 40 CFR 63.1503, may be charged to the Melting Furnace without operation of the associated control device in accordance with these provisions.
  - (1) The control device is not operating due to mechanical or operational conditions that prevent or interfere with the operation of the control device in accordance with its intended requirements; and
  - (2) The facility shall charge only clean charge to the melting furnace while the associated control device is not operating.
- b. See emissions limitation listed in Section B and Section D.

#### Compliance Demonstration:

- a. (1) During any time when the control device is not operating and material is charged to the furnace, record the amount of the clean charge and confirm that all such material meets the definition of clean charge in 40 CFR63.1503.
  - (2) Report any time scrap, other than clean charge as defined by 40 CFR63.1503, is charged to the furnace without the control device operating. The permittee shall follow the Startup, Shutdown, Malfunction (SSM) plan, and report any violation of Subpart RRR.
- b. See emissions limitation compliance in Section B.

Permit Number: F-06-035 (Revision 2) Page 33 of 33

### **SECTION I - COMPLIANCE SCHEDULE**

N/A